Women's political leadership participation around the world: An institutional analysis.

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Abstract:

Understanding institutional systems is critical for the advancement of women's participation in leadership in varying contexts. A unique and global analysis of the contextual factors that affect women in political leadership, this paper extends prior research in the field. This is a cross-country study where we ask, “How are societal-level institutional forces related to women's participation in political leadership?” We collected data from 8 secondary sources on 181 countries and conducted linear regression analyses with six institutional influences: the business environment, societal development, the economic environment, physical and technological infrastructure, political freedom, and culture. Results indicate that to increase the political leadership participation of women, we need to evaluate the following: customs and trade regulations, graft, the gender gap in political empowerment, public spending on education, the economic viability of the country, access to power and the internet, political freedom, and cultural variables like performance orientation, collectivism, and power distance.

Keywords: institutions | leadership | women | cross cultural differences | political leadership | women in politics

Article:

1. Introduction

The various factors that affect women's participation in politics differ around the world and constantly change with shifts in national context (Erez and Gati, 2004 and Stelter, 2002). This paper answers a call for the expansion of research on leader emergence to cultures and contexts outside the primarily Western settings of previous research (Javidan and Carl, 2005 and Yukl and Howell, 1999). We do so with an empirically-based, theory-driven study of institutions across societies. We respect prior research on persistent barriers to entry that impede the pursuit of women to leadership positions, e.g. research on stereotypes and glass ceilings (Hoyt, 2005 and

Powell et al., 2002) as the foundation of women in leadership research and extend this knowledge by studying women's roles in leadership in other contexts, specifically political leadership across countries and institutional settings. Leadership is made up of relationships that are deeply rooted in social settings (Bryman, 1996) as well as increasingly more external global layers (Leung, Bhagat, Buchan, Erez, & Gibson, 2005). Understanding institutional systems is critical for the advancement of research on leadership in varying contexts (Kirkman, Lowe, & Gibson, 2006). If academics, policy makers, and practitioners do not adequately understand which societal-level forces impede or facilitate women's participation in political leadership, we cannot craft programs and policies to address these issues. We need representation from both women and men in the political process because of the varying skill sets that each bring to the job (Denmark, 1993, Eagly and Carli, 2004, Jago and Vroom, 1982 and Weikart et al., 2006).

We ask the following research questions: “How are societal-level institutional forces related to women's participation in political leadership?” We do this by applying an institution-based view (DiMaggio and Powell, 1983, North, 1990 and Scott, 1987) to develop a framework to test the effects of six institutional forces: (a) the business environment; (b) societal development; (c) the economic environment; (d) physical infrastructure and technology; (e) political freedom; and (f) culture. Little attention has been awarded to the relationship between leadership and context at such a broad scale (Farid, 2007).

Our approach to institutions is similar to a PEST analysis, examining Political, Economic, Social and Technological institutions (Aguilar, 2006 and Morrison, 2008), the extended PESTEL analysis, which adds Environmental and Legislative institutions (Havergal and Edmonstone, 1999 and Rogers, 1999), and the CAGE analysis of distances, examining Cultural, Administrative, Geographic, and Economic distances among societies (Ghemawat, 2001). These widely-accepted frameworks support the validity of our institutional study.

2. Institutional theory applied to women's political leadership participation

Opportunities for societal growth and development are provided by the shared skills and knowledge within established institutional structures (North, 1990). The main theme of institutional theory is that rules, requirements, and norms govern environments, and in turn provide support and legitimacy (Scott, 1987). This leads to institutional forces that cause organizations and people to act and become more similar, conforming to norms, in an attempt at increased legitimacy and survival, a concept referred to as isomorphism. Organizations are granted greater access to resources and can strengthen their capacity to survive when they conform to rules and requirements established in the institutions in which they operate (Kostova and Zaheer, 1999 and Oliver, 1991). Actors function within institutions according to normative expectations, social values (March and Olsen, 1984 and March and Olsen, 1996), rules, and

incentives, and consider their own priorities while simultaneously operating within the parameters of the institution (Peters, 2000).

Institutions gain legitimacy when social practices become accepted and collectively expected as obvious behavior (Lucas, 2003 and Montgomery and Oliver, 1996). As it becomes more commonplace to observe women in political leadership and in influential positions, such behaviors will become an accepted schema within society. Legitimacy is achieved when the success of women leaders is recognized by one group, which in turn influences another group, and so on (Lucas, 2003). For example, an increase in working women during and following war has led generations of women to follow the example of their mothers, aunts, and neighbors into the workforce. The increasing flow of women in leadership happens over generations, with each generation becoming more comfortable with, or institutionalized to, the idea of women working outside the home and even holding leadership positions. Globalization and institutional isomorphism can also lead to a similar form of institutionalization across societies, as societies become more alike and model one another, and in this case more tolerant and accepting of women in influential positions. Therefore, we propose that as the institutional development of a country increases, women's political leadership participation also increases.

Women's advancement to independence and leadership in each country may be affected by different factors in various ways because of the dynamic nature of the environments in which they live (Erez and Gati, 2004 and Stelter, 2002). We present a developmental view of institutional forces to explore how society-wide institutions—the business environment, societal development, economics, technology and infrastructure, political freedom, and culture—might encourage or hamper women's participation in political leadership. Certain institutions are more or less supportive of women in leadership roles. Table 1 presents a summary of these relationships and shows how the support of women's political leadership participation might transform with a change in certain institutional factors. Table 1 helps us understand better how the progress in each of the six institutions tested in this study is related to the level of women's political leadership participation. Table 1 shows us that countries move from a somewhat tradition-bound, inward-looking, less-democratic orientation to a more egalitarian, performance-oriented and outward-looking orientation.

Women's political leadership participation	Business	Societal	Economic	Technological	Political	Cultural
Minimal participation	Informal relationship-based transactional arrangements, corruption, cumbersome bureaucracy, obstacles to international trade	Severe health problems, lack of medical care, land and environmental issues	Weak international trade, few economic freedoms, low level of economic development	Limited technological advancement, weak physical infrastructure	Limited civil liberties, political rights, and political competition	Collectivistic, low value for future planning, weak gender egalitarian views, avoid uncertainty, external locus of control, constrictive regilous views, self-protective/ autonomous leadership qualities
Moderate participation	Decrease transaction costs bread new opportunities	Less concern for basic safety and nourishment, more leadership opportunities	Increased economic development, more economic freedoms, trade in services that provide a competitive advantage, and investment in the private sector credit	Paved roads, railways, electricity, telephones	Open political competition, civil liberties, independent media, strong rule of law, lack of ethnic/ religious conflict	Individualistic, future-oriented, gender egalitarianism, comfort with uncertainty, internal locus of control, assertiveness, beleif in hard work, team-oriented/ participative leadership
Substantial participation	Ease of starting businesses; cheaper, more efficient business registration; online gov't technology; better business governance; rules-based society	Access to education, active laborforce, more gender equality, medical capabilities, and higher human development		Computers, internet, mobile phones		
Pronounced participation						

2.1. Business environment

Business institutions have an important role in developing a country's macro-environment and are interwoven with modernizing and globalizing influences. The institution of modern, global business practices affects the business environment, which conforms in order to establish legitimacy (DiMaggio and Powell, 1983 and Kostova and Zaheer, 1999). The transnational networks, in which multinational enterprises operate, manipulate institutional development (Dahan, Doh, & Guay, 2006). This often happens through a process of moving from informal and relationship-based transactions to more rule-based organizational arrangements in emerging economies (Peng, 2003). This leads to a decrease in transaction costs and new opportunities with an expanded network, which requires more formality to survive in this more complex system.

The business environment institution and the factors that affect doing business affect business culture and productivity. These same factors therefore affect a modernizing culture that allows and even welcomes women into positions of leadership (Weiss, 1988 and World Bank, 2007b). Changes in business systems not only affect the private sector, but are adopted at the government level as well. Some business institutional forces, such as the skill level of workers, access to tools to finance a business, global business competitiveness, and a strong entrepreneurial environment, might facilitate women's participation in leadership roles. For example, the

innovation and creativity spawned from the generation of business (Schumpeter, 1934) brings with it modernity, efficiency, and new norms with more acceptance of women in leadership positions (Newburry, Belkin, & Ansari, 2008). On the other hand, some forces associated with less-developed business institutions can inhibit leadership participation when individuals are discouraged by inefficient and unjust behaviors, such as paying bribes to bureaucratic officials, costs associated with crime and corruption, obstacles to international trade, and cumbersome bureaucratic procedures for enforcing contracts. Inefficient and antiquated business practices can negatively affect the efficiency of the public sector and citizen trust in the system. In addition, this lack of modernity may inhibit the diffusion of culture and business practices that can create a hospitable environment for women's involvement in leadership (Rogers, 2003 and Steinmo et al., 1992). Similarly, crime and corruption may inhibit political leadership for those who fear for their safety or don't trust the government system. We therefore suggest that the development of business institutions within a country is associated with women's political leadership participation. We hypothesize the following:

Hypothesis 1

. The institutional development of a country's business environment is positively related to women's political leadership participation.

2.2. Societal development

Fundamental societal development issues like gender equality, environmental sustainability, education, and family health and medical resources are related to the culture and the economic prosperity of a country and, in turn, opportunities for women to engage in leadership and activities outside the home. The preoccupation with health problems, lack of medical care, and environmental sanitation issues typically falls on women who care for the well-being of the family, and can stunt economic growth and societal development (Boserup, 1986, Lieb and Thistle, 2005 and UNIFEM, 2008). Educated women with work experience (Lincove, 2008) operating in social institutions with less concern for basic safety and nourishment for their families may be more encouraged to engage in political leadership than women who are overburdened with fundamental health and survival needs. We therefore suggest that the development of societal institutions within a country could be associated with increased women's political leadership participation. We hypothesize the following:

Hypothesis 2

. The institutional development of a country's societal indicators is positively related to women's political leadership participation.

2.3. Economic environment

Economic institutional factors, including imports and exports, goods and services that provide a competitive advantage to a country, level of economic development, economic freedoms experienced by citizens, and investment in the private sector can affect women's roles in leadership (World Bank, 2007c and World Economic Forum, 2007). For instance, economic development and support for new business growth can bring business management and cultural practices that are open to women. In addition, importing and exporting of goods and services stimulate international trade, advancing global norms such as global business practices and efficiencies (Chen, Newburry, & Park, 2009). The diffusion of such practices and norms can consequently increase the acceptance of women in society. Other economic forces associated with less-developed economic institutions, such as non-performing bank loans and credit delinquency can stunt economic growth, leading to the freezing of bank lending, unemployment, and budget cuts in the public sector, possibly hurting women's potential for leadership. We therefore suggest that the development of economic institutions within a country could be associated with increases in women's political leadership participation. We hypothesize the following:

Hypothesis 3

. The institutional development of a country's economic environment is positively related to women's political leadership participation.

2.4. Technology and physical infrastructure

The physical infrastructure of a country, like roads, railways, electricity, and telephones, as well as technology, like access to the use of computers, the Internet, and cell phones, affect distribution systems, productivity, and societal development (Lieb and Thistle, 2005 and UNDP, 2007). These infrastructural capabilities facilitate the distribution of not only goods and supplies, but also the spread of knowledge, competence, and cultural norms from other cultures and systems within the country and from other parts of the world. This may lead to global learning and expectations regarding women's roles in leadership advancement in a positive way (Newburry et al., 2008). For instance, the connection to other societies that is afforded by cellular technology and access to the Internet can facilitate international trade and an understanding of global norms, creating a hospitable institutional environment for women in leadership. We therefore suggest that the development of technological capabilities and the

physical infrastructure within a country could relate to increases in women's political leadership participation. We hypothesize the following:

Hypothesis 4

. The institutional development of a country's technological and physical infrastructure is positively related to women's political leadership participation.

2.5. Political freedom

Political institutions might be as important to the participation of women in politics as social, cultural, and economic factors, if not more so (Lincove, 2008). Political freedom in a country is denoted by a strong rule of law, respect for civil liberties, a lack of ethnic and religious strife, open political competition, low levels of corruption, and an independent media (Puddington, 2008). Countries that afford their citizens the right to free and fair electoral processes, political pluralism with competitive and open participation, a functioning government with freely elected officials and little corruption, associational and organizational rights and freedom of assembly and demonstration, personal autonomy and individual rights, and freedom of expression in the media, religious institutions, educational systems, and the criminal legal systems may be expected to have a higher representation of women in political leadership by providing an environment where individual citizens are allowed and encouraged to express their rights (Freedom House, 2008). We therefore suggest that the development of political institutions within a country could be associated with increases in women's political leadership participation. We hypothesize the following:

Hypothesis 5

. The institutional development of a country's political freedoms is positively related to women's political leadership participation.

2.6. Culture

Cultural indicators in this study relate to specific individual perceptions such as beliefs, norms, and expectations governing individuals within a society that affect the culture of that society (Leung and Bond, 2004 and Leung et al., 2002), and in turn will possibly affect the advancement of women. Specifically, certain cultural institutional forces might facilitate women's political leadership participation, such as societal comfort with uncertainty and breaking the rules

(uncertainty avoidance), rewards for performance and individual achievement (performance orientation), planning for the future (future orientation), gender equality (gender egalitarianism), societal affinity for other people and the environment (humane orientation), and societal inclinations toward assertive behavior (assertiveness) (Hofstede, 2001 and House et al., 2004). For example, women who want to achieve leadership positions or independence to care for themselves and their families will: thrive in an environment that allows them to dream ahead and plan for their futures, believe in hard work in order to achieve such positions, and be willing to debunk norms and societal expectations that might provide uncertainty. Other cultural institutional forces may inhibit women's participation in leadership roles, such as respect for group responsibilities over individual achievement (collectivism), and regard for hierarchy (power distance) (Hofstede, 2001 and House et al., 2004). Cultural obstacles to female participation vary, like religions that have been argued to be associated with lower female labor force participation, or the relegation of women to specific employment sectors or levels within organizations (Lincove, 2008). We therefore suggest that societal acceptance of liberal and open practices, individual accomplishments, hard work, and planning for the future could be associated with increases in women's political leadership participation. We hypothesize the following:

Hypothesis 6

. The institutional development of liberal and open cultural forces and rewards for individual performance are positively related to the level of women's political leadership participation.

3. Methods and analysis

To answer our research of how societal-level institutional forces relate to women's participation in political leadership, we gathered secondary data at the global level on women in political leadership and on each of the six institutions we've discussed.

3.1. Dependent variable

Table 2 shows the continuous dependent variable for the countries and the proportion of parliamentary seats held by women in each. Women in parliament represents the highest level of political leadership in each country. Because of missing data from the World Bank (2007c) and the United Nations (UNDP, 2006), we gathered the same variable from both institutions and averaged them together for a final sample size of 181 countries. Fig. 1 shows a scatterplot

graphic of the two initial raw variables. 181 countries represent the available data for all the counties that compile and report this measure.

Table 2. Proportion of seats in parliament held by women.

Rwanda	0.47	Senegal	0.19	Azerbaijan	0.12	St. Kitts and Nevis	0.07
Sweden	0.45	Estonia	0.19	Mauritius	0.12	Nigeria	0.06
Finland	0.38	Macedonia, FYR	0.19	Equatorial Guinea	0.11	Nepal	0.06
Denmark	0.37	United Kingdom	0.18	Colombia	0.11	Chad	0.06
Norway	0.37	Slovak Republic	0.18	Slovenia	0.11	Madagascar	0.06
Costa Rica	0.37	Singapore	0.17	Uruguay	0.11	Ukraine	0.06
Cuba	0.36	Moldova	0.17	Malawi	0.11	Algeria	0.06
Netherlands	0.36	San Marino	0.17	Greece	0.11	Armenia	0.05
Belgium	0.35	Philippines	0.17	Djibouti	0.11	Haiti	0.05
Argentina	0.34	Bolivia	0.17	Romania	0.11	Samoa	0.05
Austria	0.33	Lithuania	0.17	Cambodia	0.11	Kiribati	0.05
Mozambique	0.32	Czech Republic	0.16	Cayman Islands	0.11	Kyrgyz Republic	0.05
Iceland	0.32	Tajikistan	0.16	Gabon	0.10	Libya	0.05
South Africa	0.31	Dominican Republic	0.16	Hungary	0.10	Sri Lanka	0.04
Germany	0.31	Ecuador	0.16	Mali	0.10	Turkey	0.04
New Zealand	0.30	Dominica	0.16	Ghana	0.10	Iran, Islamic Rep.	0.04

Spain	0.29	Tunisia	0.16	Thailand	0.10	Mauritania	0.04
Seychelles	0.29	Angola	0.16	Paraguay	0.10	Bahrain	0.04
Grenada	0.28	Zimbabwe	0.15	Korea, Rep.	0.10	Lebanon	0.03
Vietnam	0.27	Barbados	0.15	Indonesia	0.10	Comoros	0.03
Uganda	0.27	Sierra Leone	0.15	Congo, Rep.	0.10	Marshall Islands	0.03
Australia	0.27	Ethiopia	0.15	Antigua & Barbuda	0.09	Egypt, Arab Rep.	0.03
Namibia	0.26	Honduras	0.15	Kazakhstan	0.09	Vanuatu	0.03
Tanzania	0.26	Bosnia & Herzegovina	0.15	Bhutan	0.09	Tonga	0.02
Timor-Leste	0.26	Israel	0.15	India	0.09	Papua New Guinea	0.01
Guyana	0.25	Lesotho	0.15	Malta	0.09	Kuwait	0.01
Switzerland	0.25	United States	0.15	Brazil	0.09	Yemen, Rep.	0.00
Burundi	0.25	St. Lucia	0.14	Congo, Dem. Rep.	0.09	Micronesia, Fed. Sts.	0.00
Bulgaria	0.24	Botswana	0.14	Maldives	0.09	Saudi Arabia	0.00
Mexico	0.24	Italy	0.14	Russian Federation	0.09	Solomon Islands	0.00
Peru	0.24	Andorra	0.14	Cameroon	0.09	United Arab Emirates	0.00
Bahamas, The	0.23	Guinea-Bissau	0.14	Fiji	0.09		

Lao PDR	0.23	Venezuela, RB	0.14	Japan	0.09		
Canada	0.23	Swaziland	0.14	Mongolia	0.09		
Trinidad & Tobago	0.22	El Salvador	0.14	Cote d'Ivoire	0.09		
Eritrea	0.22	Ireland	0.14	Morocco	0.09		
Suriname	0.22	Panama	0.13	Bangladesh	0.08		
Pakistan	0.21	Cape Verde	0.13	Georgia	0.08		
Turkmenistan	0.21	Gambia, The	0.13	Sao Tome & Principe	0.08		
Latvia	0.21	France	0.13	Guatemala	0.08		
Monaco	0.21	Chile	0.13	Liberia	0.08		
Nicaragua	0.21	Jamaica	0.13	Serbia and Montenegro	0.08		
St. Vincent and the Grenadines	0.21	Cyprus	0.13	Oman	0.08		
China	0.20	Zambia	0.12	Togo	0.08		
Luxembourg	0.20	Malaysia	0.12	Belize	0.07		
Portugal	0.20	Liechtenstein	0.12	Kenya	0.07		
Belarus	0.20	Syrian Arab Republic	0.12	Benin	0.07		
Croatia	0.20	Burkina Faso	0.12	Jordan	0.07		
Poland	0.20	Sudan	0.12	Niger	0.07		
Guinea	0.19	Uzbekistan	0.12	Albania	0.07		

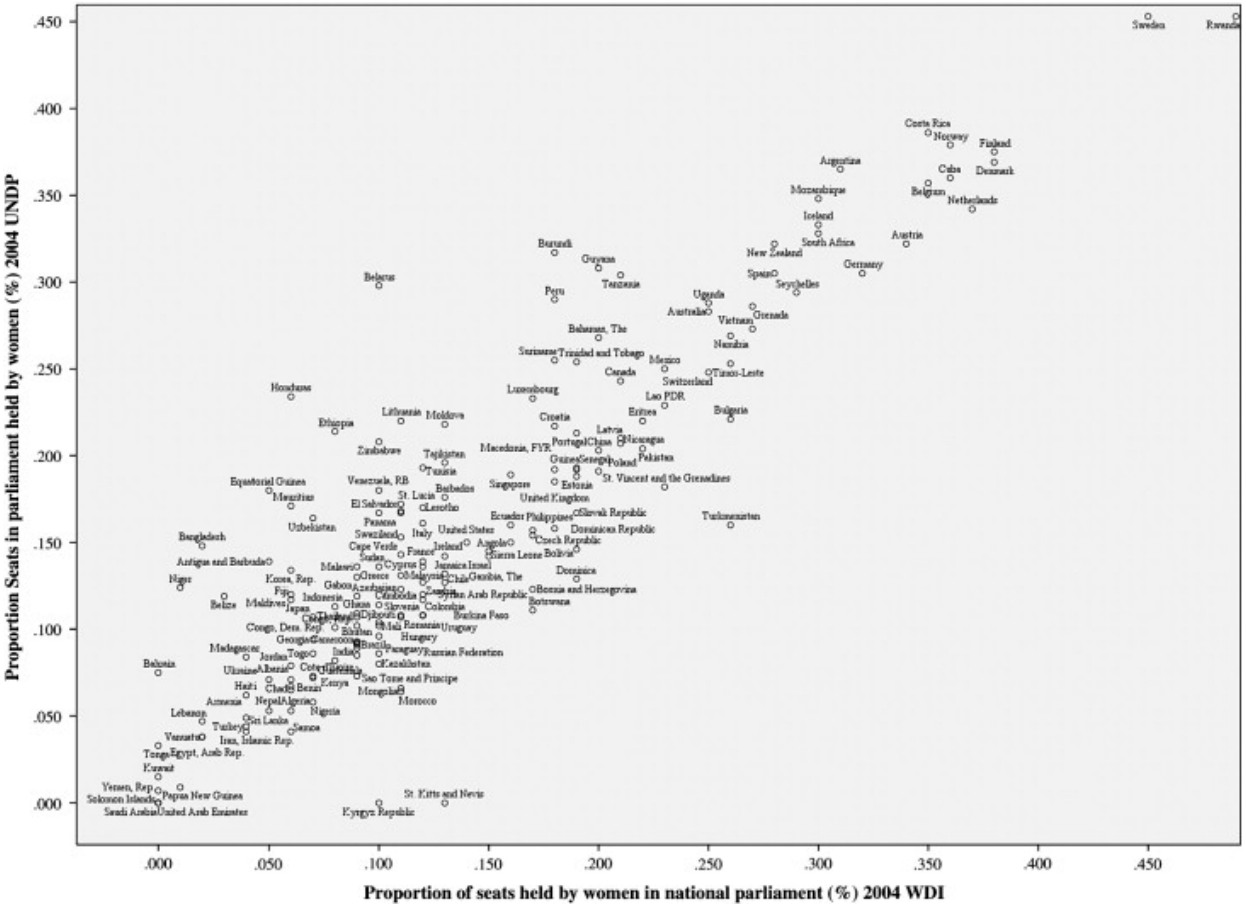

Fig. 1. Scatterplot of the two women in parliament variables.

3.2. Independent variables

It was necessary for us to use a broad range of variables in order to identify those independent variables that are most important with regard to women's political leadership participation. We conducted a cross-country analysis using macro level data from institutions including the World Bank World Development Indicators (World Bank, 2007c), World Bank Doing Business Project (World Bank, 2007a), the United Nations (UNDP, 2006), the World Economic Forum, 2007, World Economic Forum, 2008 and Freedom House, 2008, and the Heritage Foundation (2008), all totaling approximately 200 country indicators. We also used individual-level survey data from the World Bank Enterprise Survey (World Bank, 2008) with approximately 100 countries, and Project GLOBE (Global Leadership and Organizational Behavior Effectiveness) (House et al., 2004) with approximately 62 countries, all aggregated to the country level, enabling us to correct for measurement error and individual levels of description by averaging. This allows for a more representative measure than is attainable by relying on individual perception in the

singular (Roberts, Hulin, & Rousseau, 1978). Aggregates can be substituted in instances where data cannot be assessed as a whole unit and aggregated data across geographical areas is common practice (Roberts et al., 1978). Such data aggregation is required when the aerial unit—in this case “country”—is the unit of analysis.

Following previous PEST (Aguilar, 2006 and Morrison, 2008), PESTEL (Havergal and Edmonstone, 1999 and Rogers, 1999), and CAGE (Ghemawat, 2001) models mentioned earlier, the business environment hypothesis (H1) was examined using variables organized into the following categories: gift giving and bribery, crime and corruption, skill level of the workforce, border and customs regulations, licensing and permit regulations, contract enforcement, procedures for starting up a business, and financing a business. The societal development hypothesis (H2) was examined using variables organized into the following categories: employment, gender equality, education, population, and health and development. The economic environment hypothesis (H3) was examined using variables organized into the following categories: economic freedom, macroeconomic stability, factors related to GDP, loans, domestic credit, inflation, inflows and outflows (including imports, exports, and foreign direct investment), and the types of goods and services imported and exported. The technology and infrastructure hypothesis (H4) was examined using variables organized into a physical infrastructure group of variables (including railways, roads, electric power, telephony, and global competitiveness on infrastructure) and into a technology group of variables (including mobile phones, Internet usage, computers, TV's, and technological readiness). The political freedom hypothesis (H5) was examined using both political rights and civil liberties combined into the Political Freedom Index. Finally, the culture hypothesis (H6) was examined using cultural values and societal practices. Careful review of each of the variables was conducted by six academic experts for placement into each of the institutional categories examined in this study.

We first used regression analysis in groups organized by categories of variables in each hypothesis section as an exploratory technique to reduce the number of independent variables. While we have an impressive number of countries represented in our dependent variable, we could not run the analysis with all the independent variables together because of the large number of variables analyzed on only 181 country cases. We continued to reduce the list of variables by exploring principal component factor analyses, reliability analyses, correlations, and checks for multicolinearity. We combined variables into scales where possible and decided to delete or keep variables based on logical evaluations of sample sizes, weak or double loadings, and significant correlations. After a stating data set of 252 variables, Table 3 shows the reduced dataset used in the final linear regression models.5

Table 3. Reduced dataset of independent variables.

	Source
Business environment H1	
% of firms expected to give gifts to get an electrical connection 2002–2007	World Bank Enterprises Survey (World Bank, 2008)
% of firms identifying customs/trade regulations as major constraint 02–07	
Security costs (% of sales) 2002–2007	
Enforcing contracts procedures (number) 2007	World Bank Doing Business Project (World Bank, 2007a)
Societal development H2	
Public spending on education, total (% of GDP) 2004	World Bank World Development Indicators (World Bank, 2007c)
Global Competitiveness Higher Education and Training 2007	World Economic Forum, 2007 and World Economic Forum, 2008
Gender Gap Political Empowerment 2007	
Estimated earned income, female (PPP US$) 2004	United Nations (UNDP, 2006)
Human Development Index 2004	
Economics H3	
Index of Economic Freedom 2005	Freedom House (2008)
GDP per capita (constant 2000 US$) 2004	World Bank World Development Indicators (World Bank, 2007c)
Bank nonperforming loans to total gross loans (%) 2004	
Domestic credit to private sector (% of GDP) 2004	
Technology and physical infrastructure H4	
Electric power consumption (kWh per capita) 2004	World Bank World Development Indicators (World Bank, 2007c)
Fixed line and mobile phone subscribers (per 1000 people) 2004	
International Internet bandwidth (bits per person) 2004	

	Source
Political H5	
Political Freedom Index 2005	Heritage Foundation (2008)
Culture H6	
Performance orientation: society values (should be)	Project GLOBE (Global Leadership and Organizational Behavior Effectiveness) (House et al., 2004)
Future orientation: society values (should be)	
Power distance society practices (as is)	
Uncertainty avoidance values (should be)	
Gender egalitarianism society values (should be)	
In-group collectivism society practice (as is)	

We conducted final step-wise linear regression analyses with the shortened list of independent variables in blocks according to Hypothesis 1, Hypothesis 2, Hypothesis 3, Hypothesis 4 and Hypothesis 5, again because of the missing data and sample size issues associated with running all the variables together. Because this analysis employed a step-wise method, only the most discriminating variables were entered. Those variables that do not add any unique explanatory contribution did not make it into the models, answering any concern of multicolinearity. With the final list of significant independent variables for Hypothesis 1, Hypothesis 2, Hypothesis 3, Hypothesis 4 and Hypothesis 5, we ran one non-step-wise regression with all of these variables entered together to substantiate their relevance and provide variance inflation factor (VIF) scores to further examine any issues with multicolinearity. The cultural variables for Hypothesis 6 were also tested with a non-step-wise regression analysis because these variables have been previously tested and reported as distinct cultural indicators (House et al., 2004); VIF scores were also obtained. VIF scores under 10 are generally acceptable, although scores under 4 are preferred, when researchers consider other theory-related and empirically sound analyses of the data (O'Brien, 2007).

We studied countries from the years 2002–2007 for both dependent and independent variables. We believe that this 6-year range does not pose a problem for analysis because changes at the country level do not typically have broad-sweeping and swift effects detectable from year to year. In addition, because of the imperfect nature of secondary, country-level data, data are missing seemingly completely at random, by country and by year. To compensate for missing

data where appropriate, we averaged annual scores of individual indicators together. This also allowed for more stable data by decreasing the concern that a single event in a country might have uncharacteristically altered the numbers. Given the randomness of the missing data, we felt that any other procedure for assigning values would compromise the integrity of the data.

4. Results

Table 4 shows the correlations for all variables in the final dataset. Table 5 shows the regression results for Hypothesis 1, Hypothesis 2, Hypothesis 3, Hypothesis 4, Hypothesis 5 and Hypothesis 6. Model 1 in Table 5 shows that the percent of Firms Identifying Customs and Trade Regulations as a Major Constraint ($\beta = -.262$, $p < .05$) and the percent of Firms Expected to Give Gifts to Get an Electrical Connection ($\beta = -.312$, $p < .05$) are negatively related to women's participation in political leadership, explaining a significant portion of the variance (AdjR2 = .182, $p < .01$). These indicators of corruption and cumbersome customs and trade regulations are associated with less-developed business institutions and provide support for Hypothesis 1.

Table 4. Correlations of dependent and independent variables.

		1	2	3	4	5	6	7	8	9	10	11
Women seats in parliament	*r*	1										
	N	181										
Giving gifts to get an electrical connection	*r*	−.344□□	1									
	N	65	67									
Customs/trade regulations as a major constraint	*r*	−.330□□	.254□	1								
	N	99	67	104								
Gender gap political empowerment	*r*	.765□□	−.278□	−.295□□	1							
	N	126	53	85	127							
Public spending on education, total (% of GDP)	*r*	.286□□	−.376□	−.102	.321□□	1						
	N	105	37	62	83	107						

		1	2	3	4	5	6	7	8	9	10	11
GDP per capita (constant 2000 US$)	*r*	.375□□	−.452□□	−.357□□	.455□□	.305□□	1					
	N	171	67	102	126	103	176					
Electric power consumption (kWh per capita)	*r*	.386□□	−.250	−.439□□	.453□□	.470□□	.838□□	1				
	N	125	46	80	111	75	124	127				
International Internet bandwidth (bits per person)	*r*	.505□□	−.360□	−.361□□	.493□□	.353□□	.623□□	.416□□	1			
	N	122	44	69	94	77	120	94	126			
Political freedom index	*r*	.165□	−.098	−.127	.156	−.188	−.100	−.049	.016	1		
	N	164	63	96	117	97	159	114	111	170		
Performance orientation: society values (should be)	*r*	.074	−.186	.106	.075	.093	−.289	−.185	−.280	.078	1	
	N	55	18	33	55	42	56	56	48	49	56	
In-group collectivism society practice (as is)	*r*	−.650□□	.386	.305	−.557□□	−.607□□	−.742□□	−.667□□	−.673□□	.049	.166	1
	N	55	18	33	55	42	56	56	48	49	56	56
Power distance society practices (as is)	*r*	−.503□□	.137	−.051	−.336□	−.531□□	−.476□□	−.413□□	−.647□□	.054	.309□	.592□□
	N	55	18	33	55	42	56	56	48	49	5	

□p < 0.05; □□p < .01.

Table 5. Results for regression analysis.

Variables		Regression models								VIF
		1	2	3	4	5	6a	6b	7	
% of Firms identifying customs/trade regulations as major constraint	*β*	−.262□					.297	−.063		2.068
	S.E.	.001					.001	.001		
% of Firms expected to give gifts to get an electrical connection	*β*	−.312□					−.252	−.103		2.436
	S.E.	.001					.002	.001		
Gender gap political empowerment	*β*		.760□□				.874□	.518□□		2.355
	S.E.		.059				.272	.069		
Public spending on education, total (% of GDP)	*β*		.143□				.235	.061		1.866
	S.E.		.005				.017	.004		
GDP per capita (constant 2000 US$)	*β*			.375□□			.540	.038		5.780
	S.E.			.000			.000	.000		
Electric power consumption (kWh per capita)	*β*				.225□		−.190	−.011		2.969
	S.E.				.000		.000	.000		
International Internet bandwidth (bits per person)	*β*				.443□□		.290	.155□		3.488
	S.E.				.000		.000	.000		
Political freedom index	*β*					.165□	−.077	−.086		1.705
	S.E.					.001	.001	.000		
Performance orientation: society values (should be)	*β*								.244□	1.101
	S.E.								.035	
In-group collectivism society practice (as is)	*β*								−.540□□	1.552
	S.E.								.018	
Power distance society	*β*								−.255□	1.657

Variables		Regression models								
		1	2	3	4	5	6a	6b	7	VIF
practices (as is)	S.E.								.033	
N		61	76	170	92	163	15	181	54	
AdjR^2		.182□□	.665□□	.136□□	.315□□	.021□	.635+	.445□□	.468□□	

□ p < 0.05.

□□ p < .01

+ p = .053.

Model 2 in Table 5 shows that the Gender Gap in Political Empowerment (β = .760, p < .01) and Public Spending on Education (β = .143, p < .05) are positively related to women's participation in political leadership, explaining a significant portion of the variance (R2 = .665, p < .01). Public spending on education and closing the gender gap between women and men are associated with more societal development, providing support for Hypothesis 2.

Model 3 in Table 5 shows that GDP per capita (β = .375, p < .01) is positively related to women's participation in political leadership, explaining a significant portion of the variance (R2 = .136, p < .01). GDP growth is associated with more developed economic environment, providing support for Hypothesis 3.

Model 4 in Table 5 shows that Electric Power Consumption (β = .225, p < .05) and International Internet Bandwidth (β = .443, p < .01) are positively related to women's participation in political leadership, explaining a significant portion of the variance (R2 = .315, p < .01). Access to electricity and technological connections, like the Internet, are indicative of a more developed technological and physical infrastructure, providing support for Hypothesis 4.

Model 5 in Table 5 shows that Political Freedom was found to be positively related to women's participation in political leadership (β = .165, p < .05), explaining a significant portion of the variance (R2 = .021, p < .01) and providing support for Hypothesis 5.

Model 6a in Table 5 shows all the previously significant variables just mentioned entered into one regression model. The sample size for the model is low, but the model is significant and the VIF scores are well within the acceptable range, corroborating that multicolinearity is not a problem. Model 6b shows the same analysis, but with missing values replaced with means to increase the sample size, also providing a significant model with acceptable VIF scores.

Model 7 in Table 5 shows that Performance Orientation Values ($\beta = .244$, $p < .05$), Power Distance Society Practices ($\beta = -.255$, $p < .01$), and In-Group Collectivism Society Practices ($\beta = -.540$, $p < .01$) (low collectivism equates to high individualism) are related to women's participation in political leadership, explaining a significant portion of the variance ($R2 = .468$, $p < .01$). These factors are indicators of societies that build reward systems based on merit and individual performance and allow mobility and communication between hierarchical levels, providing support for Hypothesis 6.

5. Discussion

Overall, statistical analyses confirm our hypotheses that the business environment, societal development, the economic environment, physical and technological infrastructure, political freedoms, and cultures that reward individual achievements and social mobility all have significant positive implications for women's involvement in political leadership. Our findings indicate that obstacles to international trade, specifically firms reporting that customs and trade regulations are a major constraint to business practices, have a negative impact across the board on women in political leadership. It may be that an overall inefficiency with regard to government–business activities makes politics less attractive to women, and perhaps to men as well for that matter. This finding can be explained by applying diffusion theory (Rogers, 2003), the idea that international trade diffuses, or spreads, cultural values between countries. Obstacles to international trade prevent globalized ideas from entering the country. In addition, paying bribes to bureaucratic officials proves to be an inefficient business custom (Rose-Ackerman, 1999 and Shahabuddin, 2007) and an established rule of law provided by government proves to be important (Chang, 2002 and Hodgson, 2004). A government with regulations to ensure fair and efficient processes may attract women to politics, whereas bureaucratic inefficiency may cause women to avoid political leadership and have less faith in their government to provide a rule of law and property rights (Inglehart & Baker, 2000).

Societal development might represent the most important macro-level activities for practitioners, educators, and policy makers. Gender and social inequalities persist in many countries, the recent economic crisis has moved many societies in the wrong direction economically, and women are

still a disappointing minority in education and in parliament. Women remain more likely to work in the lower-paid, lower-status, less-reliable informal sector, and then get left behind with the progress of economic growth and trade liberalization (M. Chen et al., 2005). Our findings shed light on these issues. Two significant variables represent the societal institution in our study. Higher gender equality, especially closing the gap between women and men in terms of political empowerment, in a society will make it possible for more women advancing to parliamentary positions. In addition, education has long been understood as a major driving force to economic development and the empowerment of women (Lincove, 2008, Read and Oselin, 2008 and Smock, 1981). Public spending on education is a society's first line of defense to begin equalizing opportunities for men and women much earlier on. As women become more educated, they become exposed to new ideas and find independence from new skill sets, which present more options outside the home and family.

In addition to societal development, economic development is also critically important, as shown by the positive relationship between GDP per capita and women in political leadership. Simply, as the economy prospers, women become more involved in leadership. The flip side could also be argued; that as women become more involved in political leadership, the economy becomes more stimulated. Our correlation table, Table 4, also shows the significant relationship between GDP and our other independent variables along with a VIF score just over 5, highlighting the importance of economic growth to the other factors that affect women in leadership, like education, gender equality, reduced corruption, and bureaucratic obstacles to trade and commerce.

With economic growth also comes the development of the physical infrastructure and citizens' access to technology. The factors that are found to make the most significant impact on the advancement of women are electric power consumption and international Internet bandwidth. Physical infrastructure and technological advancements make society more efficient. These advances represent modernity (Fagerberg, 1994 and Fink and Kenny, 2003) and have a positive impact on women becoming more involved in leadership. Technology in particular allows for the diffusion of culture and business practices (Rogers, 2003). As countries become more connected, modern, and similar (DiMaggio and Powell, 1983 and Postman, 1993), women are allowed increasing access to leadership and have more role models when witnessing women of influence from other regions and cultures. This increased interconnectedness allows women to learn from cultures in other areas and access resources (educational, human, and economic) that might assist them with becoming more involved in politics.

Our findings also show that political freedoms, namely an independent media, open political competition, a strong rule of law, respect for civil liberties, a lack of ethnic and religious strife, freedom of assembly and demonstration, a functioning legal system, individual rights with regard to education and information sharing, and lower levels of political corruption provide an environment that is encouraging and provides opportunities for women to engage in politics. For example, a society with open political competition would be welcoming of candidates from both genders, and a functional legal system would help ensure women aren't slandered in the press or defrauded in the voting process.

Cultural norms also play a huge role in the freedom and advancement of women and, by examining the results in Table 5, it is clear that national culture (model 7) explains as much of the variance in women's participation in political leadership as all of the other factors combined (Model 6b). The factors that are found to be related to women in political leadership in our study are performance orientation, in-group collectivism, and power distance (House et al., 2004). An open and liberal environment for women to advance into political leadership involves judgments made based on performance, merit, and individual accomplishments, rather than gender. One, performance-oriented cultures value training and development, concentrate on results, reward performance and individual achievement, respect competitive behavior and assertiveness, are motivated by success, and have a sense of urgency (Javidan, 2004). Our results tell us that these cultural characteristics create an environment in which individuals are rewarded and positively recognized for their accomplishments and performance, rather than whether they are male or female, which is conducive to the advancement of women into political leadership.

Two, high power distance cultures limit mobility and communication between people at different levels of hierarchy (Carl, Gupta, & Javidan, 2004). The negative relationship between power distance and women in leadership means that countries with high representation by women in political leadership are more likely to welcome upward mobility of people into higher positions, treat all groups as equal, openly share information, and afford citizens' civil liberties. Women in such societies are able to move up the ranks into influential political positions because of low power-distance practices that allow superiors to converse with subordinates and welcome individuals to work hard and achieve higher levels of respect and authority. Therefore, while there is little that might be done to change the culture of national political systems, managers in both public and private organizations can learn from these findings and reduce the power distance in their organizations if they want to encourage women to target leadership roles.

Third, and last, in-group collectivism (Gelfand, Bhawuk, Nishi, & Bechtold, 2004) represents the extent to which individuals are proud of, loyal to, and dependent on families. We found that

collectivistic practices are negatively related to the women's participation in political leadership, and therefore individualism as the opposite end of the collectivism spectrum is positively related. Because individualistic societies view people as autonomous and independent beings, value individual goals over group goals, believe in the nuclear family unit, and have higher divorce rates as women have the freedom to break away from unhealthy marriages, such customs lend to the freedom of women to participate in activities external to the home and family responsibilities and into positions of leadership. In the earlier stages of our study, we also analyzed Institutional Collectivism, which is the extent to which individualism or group cohesion is more valued at the societal level (Gelfand et al., 2004). Our analysis did not determine that institutional collectivism has a significant impact on women becoming politicians, whereas in-group collectivism does. This means that women are not as affected by societal pressures to either pay allegiance to the family or to work toward individualistic goals as they are by family demands and responsibilities. In other words, a family that discourages a woman from the idea that she might pursue a political career is more influential than any societal-level forces. On the other hand, a family that supports or even encourages a woman to strive for political leadership will be more influential than societal approval or propaganda. Similarly, a revered family acquaintance may equally sway a woman toward or away from politics.

These individualism–collectivism findings are extremely illuminating. Interestingly, in-group collectivism is also negatively related to economic growth and public spending on education, among other of our independent variables, as shown by the significant correlation with GDP per capita in Table 4. Even though education, for example, has been found to be important for women to advance into leadership positions, it may not be enough to transform family beliefs regarding women who direct their efforts toward activities other than those related to the family unit (Read & Oselin, 2008). In order for women politicians to mentor new women in political leadership, not only do they need to motivate women, but they need to consider the influence of family as well. Social acceptance of women in politics needs to permeate society at the individual family level in order for more women to embark on such journeys. A handful of prominent, influential women or the occasional female prime minister may instigate societal acceptance, but if these women are viewed as extraordinary or remarkable, the challenge for families to support more individualistic behaviors on the part of their wives and daughters is considerable.

Looking at the collectivism findings in a more positive light, there is learning to gain. Collectivism, while negatively related to women's participation in political leadership, also tells us that family support is critical for women to pursue leadership goals. Managers, policy makers, and program designers in collectivistic cultures would benefit from acknowledging the

importance of subordinates' family needs and concerns, and incorporate these issues into decision making and planning processes.

To summarize less developed institutions that make leadership ascent difficult for women, males and the government control the economic and political systems, which can lack an adequate rule of law and be less efficient, informal, and weaker than countries with more-developed institutions. In countries with less developed institutions, technological capabilities and the physical infrastructure are often weak or inaccessible, while somewhat more advanced and productive in urban areas and in wealthier countries. In addition, girls face greater disadvantages relative to boys in cases where parents cannot afford to send all of their children to school.

Limitations begin to erode as business practices become more modernized and the physical infrastructure becomes more functional with improved access to technology. When the physical infrastructure, technology, and the business environment gain efficiencies and are better able to connect people, more opportunities emerge for women to engage in leadership. As economic systems become more formal and efficient, formal education can spread to more areas of society and is less of a concern to the general population, and people can live healthier lives and focus their energy on social mobility, health, and economic progress for their families.

To add to the discussion of our results, here we briefly explain why a few countries with more-developed institutions, like the United States, have fewer women in political leadership than less-developed countries, like Rwanda. In particular, two major forces may be responsible. One, women have decided to pursue leadership in other sectors, as entrepreneurs for example, and would rather choose careers in the private sector. Elder (2004) explained that while women in the United States are successful at achieving political positions, they are choosing not to pursue them for reasons related to lack of political self-efficacy, family responsibilities, political gender role socialization, and, perhaps most importantly, the relatively few numbers of visible female politicians to look to as role models.

Two, in order to get women more involved in politics and in societal decision-making roles, many countries have instituted a quota system (Caul, 2001) to close the gender gap in political empowerment. Quotas have been recognized as crucial mechanisms to functioning democratic systems so that half of society's population is present at decision-making tables regarding issues that affect them. Quota fulfillments often come in the form of requiring political parties to nominate women to 30% of electable positions, for example, although mandates need to be put

in place to ensure that women aren't only nominated for unwinnable seats, and their constituents still have to vote for them. Rwanda is now used as the example of a successful quota system to fast track gender balance in politics surpassing even the Scandinavian countries (Ballington & Karam, 2005), as can be seen in our Table 2. The United States is a country where a quota system for women in politics has not been instituted. Among the countries with the highest participation of women in political leadership, Cuba, Finland, and New Zealand are the only ones without a quota system (IDEA, 2010).

Finally, we do not expect the time, effort, or recipe required to stimulate progress for women in leadership to be the same for each country (Klein & Kozlowski, 2000). Context, demand, globalization, and modern-traditional cultural influences co-existing in a society will cause our findings to change over time (Rostow, 1960). Societal progression in terms of women in political leadership may be bumpy and women in leadership may be pushed forward or moved back with major events, like war or revolution (Goldstein, 2001), for example. It may be that the start of movement is the result of a particular stimulus. Although this may ignite a series of events that could begin a growth period required for progression, we do not expect a change in one independent variable in isolation to be necessarily sufficient. For example, while our results might suggest that closing the gender gap in political empowerment might be the most significant independent variable in our study, this cannot be done without more quotas, education, an increased sharing of ideas and cultures, and a rule of law to support political freedoms. We need to be patient with societal change, which often happens incrementally, while at the same time put into place the actions that could ignite a chain of events, like increase public spending on education.

6. Conclusions

We agree with Adler (1996: 133) that “tomorrow's world leaders will need to challenge and to transcend more parochial and limited leadership styles,” especially women leaders. We extend work on the personal attributes of women leaders at the top of their government systems as Prime Minister or President (Adler, 1996 and Jalalzai, 2004) to include a larger institutional review of what affects the proportion of women in parliament, which varies by country and changes with fluctuations in context (Erez and Gati, 2004 and Stelter, 2002). Driven by theory, we empirically studied institutions across societies, in order to expand previous research on leader emergence based predominately in Western settings, which is essential for the advancement of research on leadership in varying contexts (Javidan and Carl, 2005, Kirkman et al., 2006 and Yukl and Howell, 1999). Our hypotheses have been empirically supported as we've identified institutional factors that are related to women's political leadership participation. Results indicate that to increase the political leadership participation of women, we need to

evaluate the following: customs and trade regulations, graft, the gender gap in political empowerment, public spending on education, the economic viability of the country, access to electricity and the internet, political freedom, and cultural variables like performance orientation, collectivism, and power distance. Some of these variables carry more importance than others, like the gender gap in political empowerment and the collectivism cultural variable, as we discussed in detail above.

6.1. Practical implications

We recommend that in order to engage more women in political leadership, in addition to quota systems, the independent variables in Table 5 or similar proxy variables need to be the focal point of government efforts. All of these institutions are important for broad societal change to take place and significantly offer women more opportunities to participate. It will probably not be sufficient to improve one of these variables in isolation in order to expect society-wide progress, but gradual institutional improvement would be a good start. As the respect for women in leadership becomes institutionalized, even gradually among groups or regions within society, populations will witness more extensive acceptance and encouragement from women's families and communities.

We want to also offer extended implications of our findings. It is plausible that an increase in women's participation in political leadership will also affect the variables in our research in a contrasting causal direction. For example, as women become more involved in political decision making roles, they should be able to significantly influence public spending on education, the building of power plants, and increased technological connectivity. In a cyclical fashion, such actions would then have positive implications for more educated and accepting boys and girls, more connected and open business systems, and more women in political leadership.

6.2. Limitations and future research directions

There are two main limitations to this study. One, minority subcultures that do not necessarily subscribe to the norms and systems of the greater majority are not captured in this study; such subcultures unfortunately cannot be detected in a country-level analysis.

Two, sample size is limited by the mere existence of slightly more than 200 countries in the world. There is no single data source that supplies measures for all the institutions covered in our study. This required us to gather data from numerous secondary sources, which do not

necessarily include the same countries in their efforts. Therefore, the data available are often missing by year, by country, and by variable, completely at random. This means that any missing value assignment method risks manipulating data inaccurately and we cautiously utilized such a technique only to support our larger, primary analysis.

These limitations can be severely restraining. Therefore, because of the richness of the country-level data available, more widespread data collection from the World Bank, the U.N., and other sizable intergovernmental organizations is needed. The World Bank Enterprise Survey provides particularly valuable data on the business environment, but unfortunately the survey is only administered in developing countries, eliminating the potential for comparisons with developed countries.

Compelling future research would tackle the nuances of cultural effects on women in leadership (Kirkman et al., 2006 and Leung et al., 2005). When controlling for certain factors, some cultural indicators may have less of an impact. For example, the effect of cultural norms on women in leadership may be moderated by various factors: 1) males working abroad and remitting, 2) specific female dominated goods and services businesses, 3) tradition and freedom of foreign ideas, 4) women operating businesses online and not competing with traditional male jobs, and 5) the amount of income women earn compared to their spouses.

Finally, the focus of this study is specifically on women and on political leadership. Some of our findings may not be unique to women, and may affect men as well, like barriers to international trade and corruption. Further, high participation by women in political leadership does not necessarily translate to high participation of women in business leadership. To confirm this, we tested and found that women in political leadership is fairly weakly correlated to women in business leadership ($r = 0.346$, $p < 0.01$). Combining these two constructs would impede the sensitivity required for understanding the macro factors that affect women's participation in both political and business leadership. Societal support for women's progress in the private sector, into business management for example, does not necessarily translate to favorable conditions for ascending the highest levels of public leadership (Adler, 1996). In fact, results found by Terjesen and Singh (2008) indicate that countries with longer traditions of women in politics tend to have fewer women in business leadership on corporate boards.

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5 The World Bank World Enterprise Survey is gathered from business managing directors, accountants, human resource managers and other company staff primarily in the manufacturing and services sector.

The World Bank Doing Business Reports: Enforcing Contracts captures the judicial system in resolving a commercial dispute collected through study of civil procedure codes, other court regulations, and surveys completed by local litigation lawyers and judges.

The Gender Gap in Political Empowerment is one of the 12 composite scores from the Gender Gap Index. It includes the ratio of women to men in minister-level positions, the ratio of women

to men in parliamentary positions, and the ratio of women to men years in executive office (prime minister or president) in the last 50 years.

The World Bank World Development Indicators is the source for: 1) public expenditure on education consists government spending on public and private educational institutions, education administration, and subsidies for private entities (provided to the WDI by UNESCO Institute for Statistics. 2) GDP per capita is gross domestic product divided by midyear population (World Bank national accounts data, and OECD National Accounts data files). 3) Bank nonperforming loans are the value of nonperforming loans divided by the total value of the loan portfolio (provided to the WDI by IMF). 4) Domestic credit to private–financial resources provided to the private sector, such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable (provided to the WDI by IMF). 5) Electric power consumption measures the production and use of heat and power plants less transmission, distribution, and transformation losses (provided the WDI by the International Energy Agency). 6) Fixed telephone mainlines connecting a customer's equipment to the public telephone network are combined with mobile phone subscribers on a public mobile telephone service using cellular technology. 7) International Internet Bandwidth is the contracted capacity of international connections between countries for transmitting Internet traffic.

The United Nations Development Programme produces the Human Development Report, which includes 2 measures used in this study: 1) Estimated Earned Income, Female (PPP US$)—estimated logarithm based on ratio of female–male nonagricultural wage, male and females shares of the economically active population, total female to male populations, and GDP per capita (PPP US$); 2) Human Development Index—a summary measure of human development that includes life expectancy at birth, adult literacy, combined primary through tertiary education, and GDP per capita (PPP US$)

The Higher Education and Training pillar of the Global Competiveness Index measures secondary and tertiary enrollment rates as well as the quality of education as assessed by the business community.

The Political Freedom Index includes 1) political rights—free/fair electoral processes; political pluralism with competitive/open participation; functioning of government with freely elected officials and little corruption; 2) civil liberties questions—freedom in the media, religious institutions, educational systems, and in public; associational/organizational rights/freedom of assembly/demonstration; rule of law and functioning/just judicial, civil, and criminal legal systems; personal autonomy and individual rights; includes both analytical reports and numerical ratings based on foreign and domestic news reports, academic analyses, nongovernmental organizations, think tanks, individual professional contacts, and visits to the region. (1 is the highest ranking a country can achieve for the most politically free. Therefore, we reversed this variable for analysis in order to properly show positive and negative relationships.)

Global Leadership and Organizational Behavior Effectiveness Research Program (GLOBE) surveyed 17,000 middle managers in 62 societies in 3 industries and developed nine quantitative dimensions of culture: future orientation, in-group collectivism, institutional collectivism, power distance, uncertainty avoidance, gender egalitarianism, performance orientation, assertiveness, and humane-orientation; studied cultural “values” by asking respondents' judgments of “what should be” versus “practices” by asking about respondents to answer questions regarding “what is.”